

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001571

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C12N 15/67, C12N 15/68, C12N 15/74

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, BIOSIS, MEDLINE, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Liang, Weili et al, "Construction and Evaluation of a Safe, Live, Oral Vibrio cholerae Vaccine Candidate, IEM108", Infection and Immunity, October 2003, vol. 71, no. 10, page 5498 - 5504, abstract; page 5499, column 2, paragraph 4-6; table 2; figure 1; page 5500; column 2, paragraph 4 - page 5501, column 1, paragraph 1; page 5503, column 1, paragraph 3 --	1-4,6-12
A	Ugorcáková, J. et al., "Construction and Characterization of New Corynebacterial Plasmids Carrying the alpha-Amylase Gene", Folia Microbiol, 1996, vol. 41, no. 1, page 10 - page 14, abstract; page 11, last 3 lines; figures 1-2 --	1-14

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date, or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

22 February 2005

Date of mailing of the international search report

25 -02- 2005

Name and mailing address of the ISA/

Swedish Patent Office

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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE2004/001571

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

a. type of material

- ☒ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☒ in written format  
☒ in computer readable form

c. time of filing/furnishing

- ☒ contained in the international application as filed  
☒ filed together with the international application in computer readable form  
☐ furnished subsequently to this Authority for the purposes of search

2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/001571

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9961634 A1 (ACTIVEBIOTECH AB), 2 December 1999 (02.12.1999)  --	1-14
A	US 6043057 A (JAN HOLMGREN ET AL), 28 March 2000 (28.03.2000)  --	1-14
A	Ichikawa, Yuko et al, "Very efficient extracellular production of cholera toxin B subunit using Bacillus brevis", FEMS Microbiology Letters, 1993, vol. 111, page 219 - page 224  -- -----	1-14

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

30/01/2005

International application No.

PCT/SE 2004/001571

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				US	5834246	A	10/11/1998